

P8330US(PCT)

## Claims

1. Floor table (1) of a concrete formwork for producing a concrete floor (2) comprising at least one front (18, 19) and one rear holder (23) for mounting at least one front (11) and at least one rear ligament (12) of a crane harness (9), wherein the holders (18, 19, 23) are accessible to fasten the ligaments (11, 12) in the retracted state of the floor table (1) without formwork and disposed below the freshly hardened concrete floor (2), characterized in that at least one holder (23) is designed as bollard (31), which can be moved out of a formwork surface (4) of the floor table (1) towards the concrete floor (2), in particular, wherein the upper side (33) of the bollard (31) terminates flush with the formwork surface (4) in the retracted state of the bollard (31), the bollard (31) having a constriction (32) or thickening in the region of its end facing the concrete floor (2).
2. Floor table (1) according to claim 1, characterized in that the holders (18, 19, 23) of the floor table (1) are accessible to fasten the ligaments (11, 12) when the floor table (1) is lowered relative to the concrete floor (2) by 50 cm or less, in particular 30 cm or less.
3. Floor table (1) according to any one of the preceding claims, characterized in that the floor table (1) has at least one working platform (20, 24) on the edge side, and at least one holder (18, 19) is disposed in the region of the at least one working platform (20, 24).
4. Floor table (1) according to any one of the preceding claims, characterized in that a formwork surface (4) of the floor table (1) comprises at least one flap, in particular, wherein the flap terminates

flush with the formwork surface (4) when the flap is closed, wherein the flap can be opened from the side of the floor table (1) facing away from the concrete floor (2), and wherein a ligament (11, 12) of the crane harness (9) can be guided through the open flap, wherein the ligament (11, 12) can be mounted to a holder which is disposed on the side of the floor table (1) facing away from the concrete floor (2), in particular, wherein a deflecting device is mounted to one edge of the open flap.

5. Floor table (1) according to any one of the preceding claims, characterized in that at least one holder is disposed on the side of the floor table (1).
6. Device for displacing a floor table (1) according to any one of the preceding claims, comprising a crane harness (9) with at least two ligaments (11, 12) for mounting to the holders (18, 19, 23) of the floor table (1), and wherein at least one front ligament (11) is provided which is formed for mounting to a front holder (18, 19) of the floor table (1) remote from the concrete floor during displacement, and wherein at least one rear ligament (12) is provided which is formed for mounting to a rear holder (23) of the floor table (1) close to the concrete floor during displacement, and moreover comprising a relocating unit (10) in which the crane harness is suspended, and at least one roller means (8) on which the floor table (1) can be horizontally displaced when the formwork has been removed, and the device, in particular, the relocating unit (10) comprises means for shortening the at least one rear ligament (12), characterized in that the device comprises at least one deflecting device (26) for mounting to an edge (25) of the hardened concrete floor (2), wherein a latch shoe (13) is disposed at the end of a ligament (12), the latch shoe (13) comprising a lower part (34)

having a recess (37), the recess (37) being formed to grasp below the thickening or around the constriction (32) when the bollard (31) has been inserted, and the latch shoe (31) comprising a projection (39) which blocks a motion of the bollard (31), in particular, against the insertion direction of the bollard (31) in the recess (37), in the introduced and largely inserted state of the bollard (31).

7. Device according to claim 6, characterized in that the device, in particular, the relocating unit (10) comprises means for extending the at least one front ligament (11).
8. Device according to either one of the claims 6 or 7, characterized in that the at least one front ligament (11) and the at least one rear ligament (12) are connected to each other, the connected ligament running through the relocating unit (10), the relocating unit (10) comprising a drive (57) for controlling passage of the connected ligament.
9. Device according to claim 8, characterized in that the connected ligament comprises a central control ligament (49) in the region of the relocating unit (10), whose passage through the relocating unit (10) can be controlled by the drive (57), and a central support ligament (48) which runs through the relocating unit (10) via deflecting devices, in particular, deflecting rollers (51-54) or deflecting sheets and without being braked.
10. Device according to any one of the claims 6 through 9, characterized in that the device comprises an electronic horizontal sensor to be mounted to the floor table (1), wherein the means and/or the drive (57) can be controlled via information from the electronic horizontal

sensor in such a manner that horizontal orientation of a floor table (1) mounted to the ligaments (11, 12) can be regulated.

11. Device according to any one of the claims 6 through 10, characterized in that the front ligament (11) is branched into several, in particular, two front partial ligaments (16, 17) for mounting to a corresponding plurality of front holders (18, 19) of the floor table (1).
12. Device according to any one of the claims 6 through 11, characterized in that the rear ligament (12) is branched into a plurality, in particular two, rear partial ligaments to be mounted to a corresponding plurality of rear holders of the floor table (1).
13. Device according to any one of the claims 6 through 12, characterized in that one or more ligaments (11, 12, 16, 17; 48, 49) are entirely or partially formed as steel chains.
14. Device according to any one of the claims 6 to 13, characterized in that the latch shoe (13) comprises an upper part (35) which is pivoted upward relative to the lower part (34) in the mounted state, in particular, by a tensile load on the ligament (12) mounted to the latch shoe (13), and wherein, in the upwardly pivoted state of the upper part (35), a safety pin (40) forces the inserted bollard (31) in the direction of the largely inserted state of the bollard (31) and therefore into the blocked position of the bollard (31).
15. Method for displacing a floor table (1) according to any one of the claims 1 through 5, comprising the following steps:

- a) when a concrete floor (2) has hardened, the floor table (1) formwork is removed and the floor table is lowered onto at least one roller means (8);
- b) the at least one front ligament (11) and the at least one rear ligament (12) are mounted in corresponding holders (18, 19, 23) of the floor table (1) when the floor table (1) has been retracted below the hardened concrete floor (2);
- c) the floor table (1), being supported on the at least one roller means (8), is displaced from below the hardened concrete floor (2), in particular, using manual labor, wherein a crane keeps the front ligament (11) tightened at a constant length, thereby ensuring a substantially horizontal orientation of the floor table (1);
- d) as soon as the hardened concrete floor (2) no longer projects past the rear holder (23), the rear ligament (12) is tightened; subsequently, the rear ligament (12) is gradually shortened and/or the front ligament (11) is gradually extended, thereby gradually displacing a relocating unit (10), to which the ligaments (11, 12) are mounted, to the center of gravity (30) of the floor table (1), with shortening and/or extension being controlled in such a manner that the floor table (1) remains in a substantially horizontal orientation;
- e) as soon as the relocating unit (10) has reached a position above the center of gravity of the floor table, no load acts on the roller means (8) and the crane moves the floor table (1) out of the finished storey for further use, in particular, disposing it onto the hardened concrete floor (2) to produce a further storey.

16. Method for displacing a floor table (1) according to any one of the claims 1 through 5, with a device according to any one of the claims 6 through 14, comprising the following steps:

- a) when a concrete floor (2) has hardened, the floor table (1) formwork is removed and the floor table is lowered to at least one roller means (8);
- b) the at least one front ligament (11) and the at least one rear ligament (12) are mounted in corresponding holders (18, 19, 23) of the floor table (1) when the floor table (1) has been retracted below the hardened concrete floor (2), and the deflecting device (26) is installed on the edge (25) of the hardened concrete wall (2) facing a crane;
- c) the relocating unit (10) is pulled upwards by the crane, wherein the rear ligament (12) slides on the installed deflecting device (26), and wherein the floor table (1) automatically moves out from below the hardened concrete floor (2): at the same time, at least the means for shortening the rear ligament (12) are controlled in such a manner that the floor table (1) remains in a substantially horizontal orientation;
- d) as soon as the rear ligament (12) loses contact with the installed deflecting device (26), the rear ligament (12) is gradually further shortened and/or the front ligament (11) is gradually extended, whereby the relocating unit (10) is gradually displaced to the center of gravity (30) of the floor table (1), with shortening and/or extension being controlled in such a manner that the floor table (1) remains substantially horizontally oriented;
- e) as soon as the relocating unit (10) has reached a position above the center of gravity (30) of the floor table (1), no load

acts on the roller means (8) and the crane moves the floor table (1) out of the finished storey for further use, in particular, disposing it on the hardened concrete floor (2) to produce a further storey, and the installed deflecting device (26) is removed.

17. Method according to either one of the claims 15 or 16, characterized in that, during step b), at least one guiding chord (22) is mounted to the end of the ligament (12), and the end of the ligament (12) is pulled by the at least one guiding chord (22) towards the holder (23) and/or is oriented relative to the holder (23).